

NOVEMBER 21, 2012

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) INSPECTIONS

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA

CONTRACT SD-2012-04



| SHEET NO. | SHEET NAME/PROJECT SITE |
|-----------|---|
| 1 | COVER SHEET |
| 2 | GENERAL AND PROJECT NOTES |
| 3 | PROJECT SITES MAP |
| 4 | NINTH STREET |
| 5 | WEST MAIN STREET @ NORTH GREGSON STREET |
| 6 | FERNWAY AVENUE @ LIGGETT STREET |
| 7 | EAST MAIN STREET @ ALSTON AVENUE |
| 8 | DURHAM RESCUE MISSION |
| 9 | 2024 WEST MAIN STREET |
| 10 | PEACHTREE PLACE @ LIBERTY STREET |
| 11 | DURHAM MARRIOTT |
| 12 | FOSTER STREET |
| 13 | WEST TRINITY AVENUE @ NORTH DUKE STREET |
| 14 | DURHAM SCHOOL OF THE ARTS |
| 15 | URBAN AVENUE @ NORTH DUKE STREET |
| 16 | NORTH QUEEN STREET @ OTTAWA AVENUE |
| 17 | WATTS STREET @ GLORIA AVENUE |



CITY OF DURHAM, NORTH CAROLINA
DEPARTMENT OF PUBLIC WORKS
STORMWATER & GIS SERVICES DIVISION
101 CITY HALL PLAZA
DURHAM, NORTH CAROLINA 27701
PHONE: (919) 560-4326
FAX: (919) 560-4316
<http://durhamnc.gov/ich/op/pwd/storm/Pages/Home.aspx>

PROJECT CONTACT: DANA HORNKOHL, P.E., CFM
PHONE: (919) 560-4326, EXT. 30246
E-MAIL: dana.hornkohl@durhamnc.gov

\\Durham-pw\public_works\SW\Division_Files\Infrastructure\Drainage\Projects\ConstructionContracts\SD-2012-04\AutoCAD\SD-2012-04_GeneralNotes.dwg

GENERAL NOTES:

1. BASE MAP INFORMATION PROVIDED ON THESE DRAWINGS WAS DERIVED FROM CITY OF DURHAM GEOGRAPHIC INFORMATION SYSTEM UTILITY INVENTORIES AND INFORMATION. BASE MAP INFORMATION IS SCHEMATIC. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK ON ANY PROJECT SITE. CONTRACTOR SHALL INFORM THE RESIDENT PROJECT REPRESENTATIVE OF ANY DISCREPANCY BETWEEN EXISTING CONDITIONS AND THESE DRAWINGS WHERE IT IS ANTICIPATED TO AFFECT THE WORK.
2. LOGISTICS OF EACH PROJECT SITE SHALL BE DISCUSSED IN DETAIL BY THE PRIVATE PROPERTY OWNER, ENGINEER, RESIDENT PROJECT REPRESENTATIVE, AND CONTRACTOR AT INDIVIDUAL PRE–RECONSTRUCTION MEETINGS FOR EACH PROJECT SITE PRIOR TO ANY WORK.
3. ALL CONTRACTORS, AT THE TIME OF BID, SHALL HAVE A VALID NORTH CAROLINA CONTRACTOR LICENSE AND UTILITY CONTRACTOR LICENSE. THESE LICENSES SHALL NOT EXPIRE DURING THE EXPECTED TIME OF CONSTRUCTION.
4. CONTRACTOR SHALL MAINTAIN A COPY OF THE CONTRACT DOCUMENTS (INCLUDING DRAWINGS), PERMITS, AND PERMIT PROVISIONS ON THE ACTIVE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES AND SHALL COORDINATE ALL WORK WITH THE RESIDENT PROJECT REPRESENTATIVE AND UTILITY COMPANIES (SEE UTILITY LOCATION NOTES ON THIS SHEET). UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE.
6. UNDERGROUND AND ABOVE GROUND FACILITIES HAVE BEEN SHOWN PICTORIALY ON THE DRAWINGS. HOWEVER, CONTRACTOR SHALL CONTACT THE APPROPRIATE LOCAL UTILITY COMPANIES TO FLAG EXISTING UNDERGROUND LINES PRIOR TO EXCAVATION.
7. WHEN REQUIRED BY THE RESIDENT PROJECT REPRESENTATIVE, CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR INDIVIDUAL PROJECT SITES PRIOR TO COMMENCING WORK. PLAN SHALL CONFORM TO THE REQUIREMENTS OF THE RESIDENT PROJECT REPRESENTATIVE AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RULES AND REGULATIONS.
8. CONTRACTOR SHALL PROTECT EXISTING LANDSCAPING. ALL DISTURBED EXISTING LANDSCAPED AREAS TO REMAIN SHALL BE RESTORED TO EXISTING ELEVATIONS, SEEDED, AND MULCHED AS APPROPRIATE. LANDSCAPING IS INCLUDED IN THIS CONTRACT AND ALL AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION OR BETTER.
9. CONTRACTOR SHALL AVOID DAMAGING EXISTING PAVEMENT TO REMAIN. ALL EXISTING PAVEMENT TO REMAIN DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPLACED AT CONTRACTOR’S EXPENSE.
10. CONTRACTOR SHALL REPLACE ALL REMOVED OR DAMAGED PAVEMENT TO REMAIN WITH SAME, INCLUDING MATERIAL, COLOR, AND TEXTURE. REPAIRED PAVEMENT SHALL BE REPLACED TO EXISTING PAVEMENT ELEVATIONS. CONTRACTOR SHALL NOT PROCEED WITH PAVING UNTIL ALL COMPACTION AND PROOFROLLING TESTS HAVE BEEN RECEIVED AND APPROVED BY THE RESIDENT PROJECT REPRESENTATIVE.
11. CONTRACTOR SHALL NOT IMPEDE ACCESS TO EXISTING BUILDINGS OR AREAS AT THE PROJECT SITE WITHOUT THE APPROVAL OF THE PRIVATE PROPERTY OWNER AND THE RESIDENT PROJECT REPRESENTATIVE. IN AREAS WHERE ACCESS MAY BE RESTRICTED DUE TO THE WORK, THE CONTRACTOR SHALL COORDINATE WITH THE PRIVATE PROPERTY OWNER AND RESIDENT PROJECT REPRESENTATIVE A MINIMUM OF 72–HOURS IN ADVANCE OF A PROPOSED RESTRICTION OF ACCESS. CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES FOR USE WITHOUT INTERRUPTION.
12. ANY UTILITY SERVICE INTERRUPTIONS SHALL BE COORDINATED WITH THE PRIVATE PROPERTY OWNER AND RESIDENT PROJECT REPRESENTATIVE A MINIMUM OF 15–DAYS IN ADVANCE OF THE PROPOSED INTERRUPTION.
13. CONTRACTOR SHALL PROVIDE A PRELIMINARY PROGRESS SCHEDULE PRIOR TO BEGINNING THE WORK, AND SHALL UPDATE SCHEDULE MONTHLY OR AS REQUIRED BY THE RESIDENT PROJECT REPRESENTATIVE. CONTRACTOR SHALL COORDINATE WITH THE RESIDENT PROJECT REPRESENTATIVE TO PRODUCE THE PROGRESS SCHEDULE.
14. NO SOILS INVESTIGATION HAS BEEN CONDUCTED FOR THE PROJECT SITES IN THIS CONTRACT.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISCIPLINE AND TRADE COORDINATION.

PROJECT NOTES:

1. THE PRIORITY LIST OF PROJECT SITES IS AS FOLLOWS:

1.1. DURHAM RESCUE MISSION, SHEET 8

1.2. NORTH QUEEN STREET @ OTTAWA AVENUE, SHEET 16

1.3. PEACHTREE PLACE @ LIBERTY STREET, SHEET 10

1.4. EAST MAIN STREET @ ALSTON AVENUE, SHEET 7

1.5. WEST MAIN STREET @ NORTH GREGSON STREET, SHEET 5

1.6. DURHAM SCHOOL OF THE ARTS, SHEET 14

1.7. WEST TRINITY AVENUE @ NORTH DUKE STREET, SHEET 13

1.8. URBAN AVENUE @ NORTH DUKE STREET, SHEET 15

1.9. FERNWAY AVENUE @ LIGGETT STREET, SHEET 6

1.10. DURHAM MARRIOTT, SHEET 11

1.11. FOSTER STREET, SHEET 12

1.12. WATTS STREET @ GLORIA AVENUE, SHEET 17

1.13. NINTH STREET, SHEET 4

1.14. 2024 WEST MAIN STREET, SHEET 9
2. CONTRACTOR MAY REQUEST A CHANGE IN THE PRIORITY LIST OF PROJECT SITES. CONTRACTOR SHALL REQUEST A CHANGE IN THE PRIORITY LIST FROM THE RESIDENT PROJECT REPRESENTATIVE.

UTILITY LOCATION NOTES:

THE FOLLOWING UTILITY OWNERS ARE MEMBERS OF THE BELOW LISTED ASSOCIATION AND OPERATE UNDERGROUND UTILITIES IN DURHAM COUNTY.

| UTILITY NAME AND ADDRESS | |
|--|--|
| CAROLINA POWER & LIGHT CO.: | P.O. BOX 1551, RALEIGH, NC 27602 |
| GENERAL TELEPHONE CO. OF THE SOUTHEAST: | P.O. BOX 611, DURHAM, NC 27702 |
| CITY OF DURHAM: | 101 CITY HALL PLAZA, DURHAM, NC 27701 |
| DURHAM CABLE VISION: | P.O. BOX 30002, DURHAM, NC 27701 |
| PUBLIC SERVICE OF NORTH CAROLINA: | P.O. BOX 1398, GASTONIA, NC 28052 |
| DUKE POWER CO.: | P.O. BOX 33189, CHARLOTTE, NC 28242 |
| SOUTHERN BELL TELEPHONE CO.: | ROOM 720, SOUTHERN NATIONAL BANK BUILDING, CHARLOTTE, NC |
| AMERICAN TELEPHONE & TELEGRAPH COMMUNICATIONS: | 900 FRANKLIN AVE., CHARLOTTE, NC 28206 |

AS PER ARTICLE 3 OF CHAPTER 87 OF THE NORTH CAROLINA GENERAL STATUTES, RECORD IS HEREBY MADE THAT THE ABOVE UTILITIES MAY BE NOTIFIED FOR THE PURPOSE OF LOCATING THEIR RESPECTIVE UNDERGROUND UTILITIES THROUGH THE ASSOCIATION KNOWN AS:

NORTH CAROLINA ONE–CALL CENTER
PHONE: (800) 632–4949 OR 811
WEB SITE: WWW.NCOCC.ORG

NOTE:
THE ABOVE LISTING IS OF ASSOCIATION MEMBERS ONLY. THERE IS A POSSIBILITY THAT NON–MEMBER UTILITY OWNERS ALSO OPERATE IN THE AREA.

ABBREVIATIONS:

| ABBREVIATION | DESCRIPTION |
|--------------|--|
| AASHTO | AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS |
| ASTM | AMERICAN SOCIETY FOR TESTING AND MATERIALS |
| CB | CATCH BASIN |
| CMP | CORRUGATED METAL PIPE |
| EL | ELEVATION |
| EW | END WALL |
| FEMA | FEDERAL EMERGENCY MANAGEMENT AGENCY |
| FES | FLARED END SECTION |
| FIRM | FLOOD INSURANCE RATE MAP |
| GW | GUY WIRE |
| INV | INVERT |
| LBS | POUNDS |
| LF | LINEAR FEET |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| NCDENR | NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES |
| NCDOT | NORTH CAROLINA DEPARTMENT OF TRANSPORTATION |
| NCOCC | NORTH CAROLINA ONE–CALL CENTER |
| OC | ON CENTER |
| PP | POWER POLE |
| RCP | REINFORCED CONCRETE PIPE |
| SFHA | SPECIAL FLOOD HAZARD AREA |
| SD | STORM DRAINAGE |
| SDMH | STORM DRAINAGE MANHOLE |
| SS | SANITARY SEWER |
| SSMH | SANITARY SEWER MANHOLE |
| SY | SQUARE YARDS |
| TYP | TYPICAL |

CONTRACT SD-2012-04
GENERAL AND PROJECT NOTES
MS4 INSPECTIONS
SHEET NO. 2

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA

NOVEMBER 21, 2012

CONTRACT SD-2012-04

MS4 INSPECTIONS

SHEET NO. 3

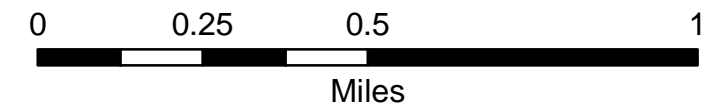
PROJECT SITES

STORMWATER & GIS SERVICES DIVISION

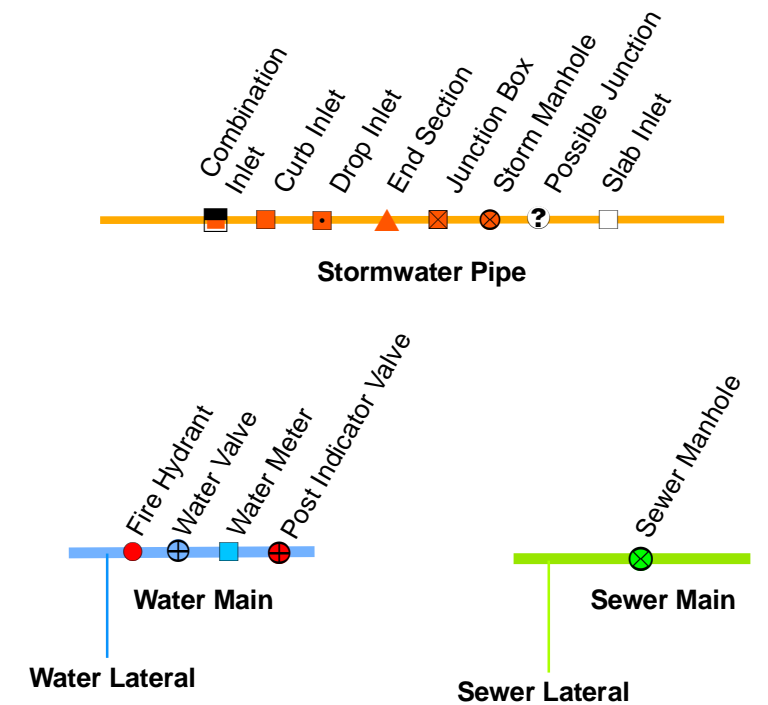
DEPARTMENT OF PUBLIC WORKS

CITY OF DURHAM, NORTH CAROLINA

NOVEMBER 21, 2012



Legend



Property Boundary

Limits Of Video Survey

Background Imagery: 2010 North Carolina Statewide Orthophotography

West Trinity Avenue @
North Duke Street
(SHEET 13)

Durham School
Of
The Arts
(SHEET 14)

Ninth Street
(SHEET 4)

2024 West Main
Street
(SHEET 9)

Watts Street @
Gloria Avenue
(SHEET 17)

West Main Street @
North Gregson Street
(SHEET 5)

Fernway Avenue @
Liggett Street
(SHEET 6)

Durham Marriott
(SHEET 11)

Foster Street
(SHEET 12)

Urban Avenue @
North Duke Street
(SHEET 15)

Durham Rescue
Mission
(SHEET 8)

North Queen Street @
Ottawa Avenue
(SHEET 16)

Peachtree Place @
Liberty Street
(SHEET 10)

East Main Street @
Alston Avenue
(SHEET 7)

CONTRACT SD-2012-04
MS4 INSPECTIONS
SHEET NO. 4

Ninth Street

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA
NOVEMBER 21, 2012

0 50 100
Feet
1 inch = 50 feet

JB-41068

MS4 SIZE, LOCATION, MATERIAL, AND CONDITION
VERIFICATION.
LIMITED ACCESS. STRUCTURE IS CAPPED WITH
CONCRETE SLAB.

FROM: MH-41040
TO: UNKNOWN
APPROX. LENGTH: 200 FT.

MS4 SIZE, LOCATION, MATERIAL, AND CONDITION
VERIFICATION.

VERIFY DOWNSTREAM DESTINATION OF BOX
CULVERT.

DI-41062
DI-41-64

MS4 SIZE, LOCATION, MATERIAL, AND CONDITION
VERIFICATION.

VERIFY UPSTREAM SOURCE OF TWO 24" RCP
STUBS.

DI-41043

FLUSHING FOR MS4 SIZE, LOCATION, MATERIAL, AND
CONDITION VERIFICATION.
MS4 SIZE, LOCATION, MATERIAL, AND CONDITION
VERIFICATION.

BOX CULVERT
DESTINATION UNKNOWN

TWIN 24" RCP
PIPES CONTINUE
(SOURCE UNKNOWN)

DI-41062
DI-41064

0822-18-31-1951
COUCH FURNITURE CO
714 NINTH ST

0822-18-31-1817
RADIANT 451 LLC
712 NINTH ST

0822-18-31-1927
V & W ENTERPRISES
716 NINTH ST

0822-18-32-1051
TOP OF THE NINTH INC
720 NINTH ST

NINTH ST

#9 ALY

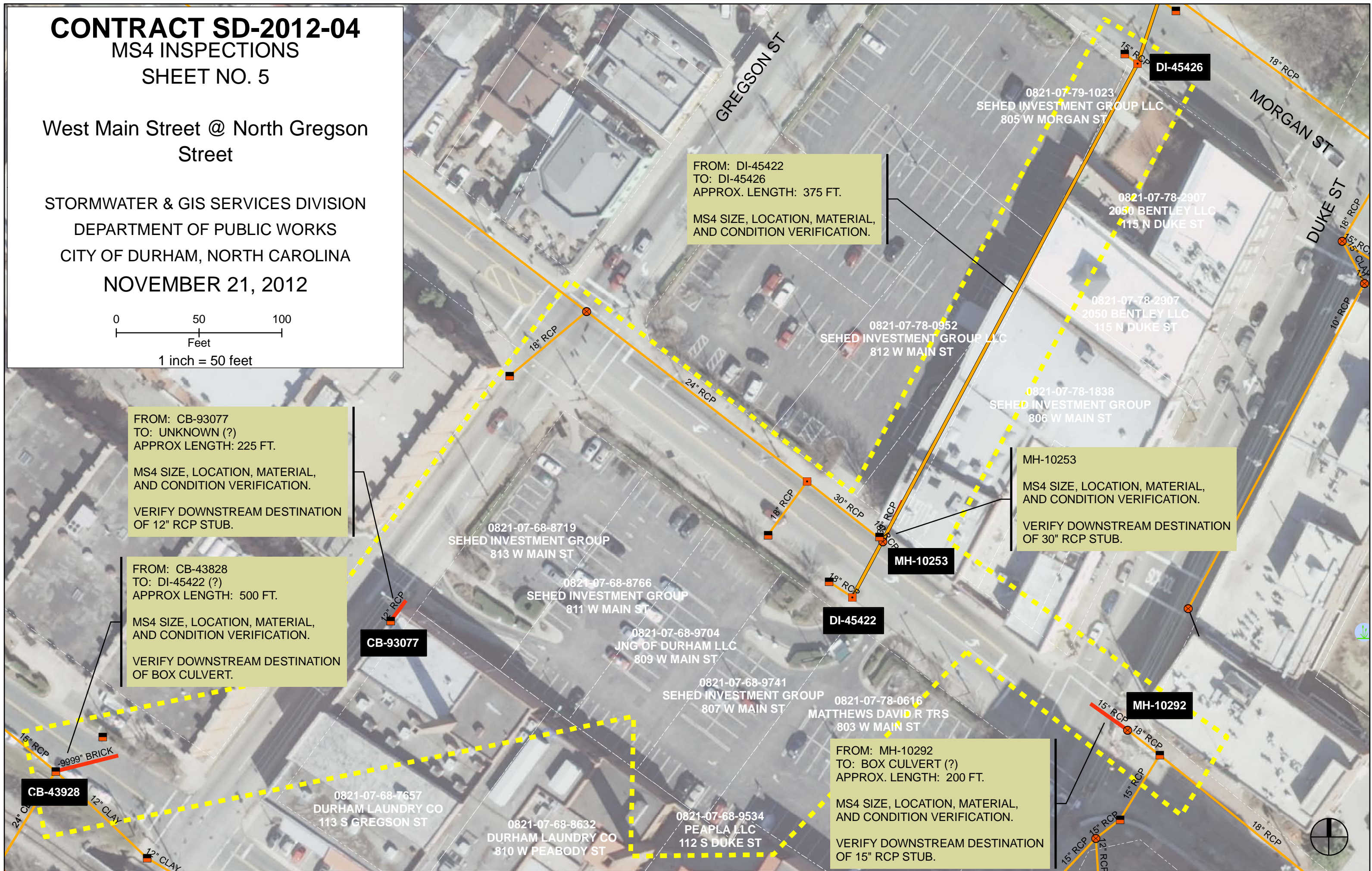
PERRY ST



0 50 100

Feet

1 inch = 50 feet



VERIFY UPSTREAM SOURCE OF 12" RCP
STUB.

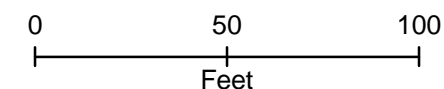
0821-08-89-0358
NORFOLK & WESTERN RAILWAY
332 FULLER ST

VERIFY UPSTREAM SOURCE OF
24" RCP STUB.

Fernway Avenue @ Liggett Street

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA

NOVEMBER 21, 2012



1 inch = 50 feet

VERIFY UPSTREAM SOURCE OF 12" CLAY STUB.

VERIFY EXISTENCE OF POSSIBLE
DOWNSTREAM JUNCTION.

0821-08-78-8788
FCP WEST VILLAGE PHASE I OWNER
602 W MORGAN ST

0821-08-78-8788
FCP WEST VILLAGE PHASE I OWNER
602 W. MORGAN ST

DI-60684

DI-60690

0821-08-88-0696
NORFOLK & WESTERN RAILWAY
526 W MORGAN ST

VERIFY UPSTREAM SOURCE OF 18" RCP
STUB.

VERIFY UPSTREAM SOURCES OF
15" RCP STUB, 18" RCP STUB, AND
30" RCP.

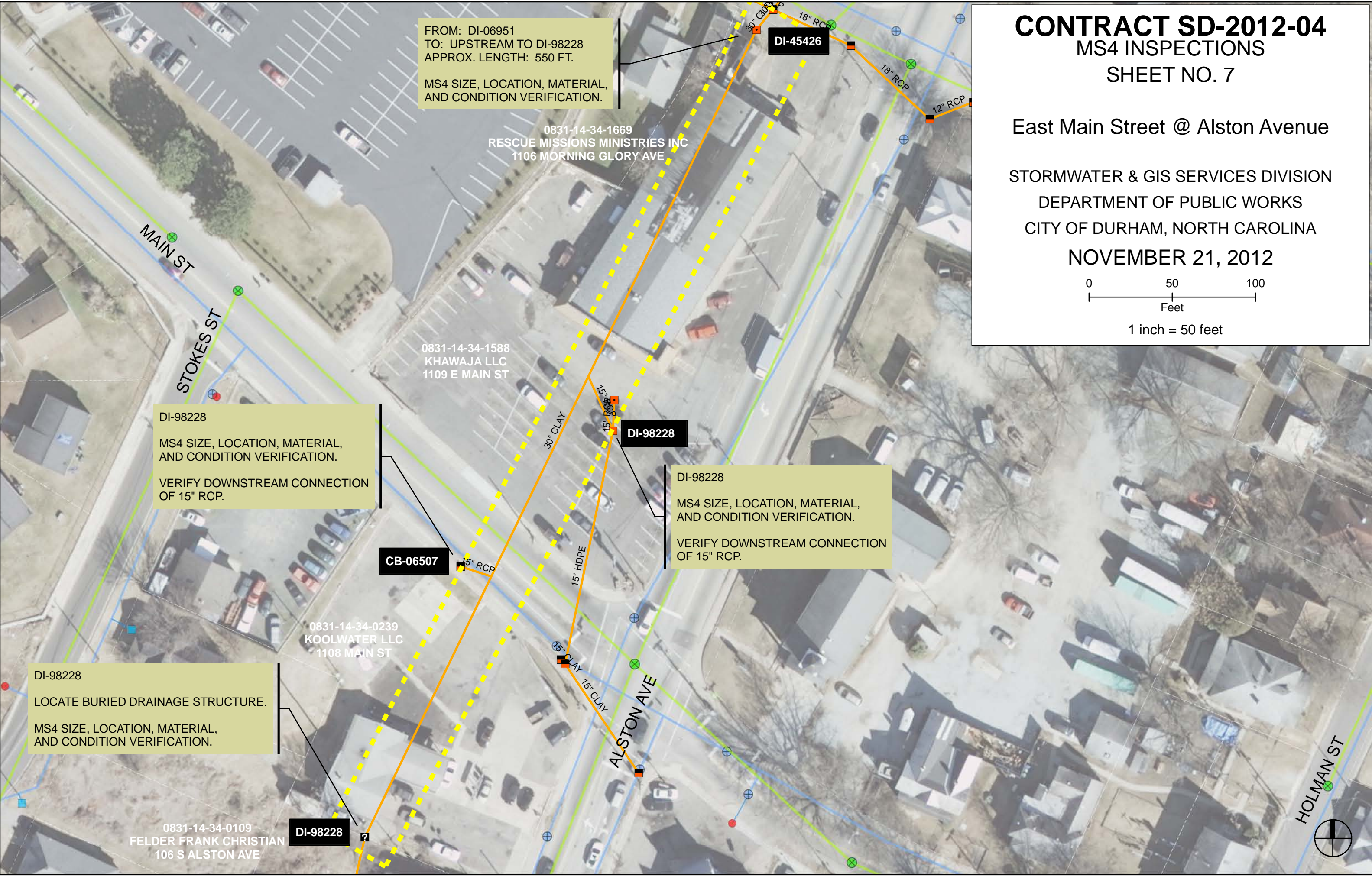
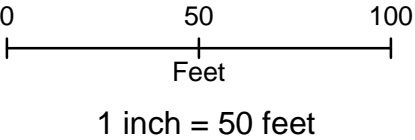


CONTRACT SD-2012-04
MS4 INSPECTIONS
SHEET NO. 7

East Main Street @ Alston Avenue

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA

NOVEMBER 21, 2012



CONTRACT SD-2012-04
MS4 INSPECTIONS
SHEET NO. 8

Durham Rescue Mission

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA

NOVEMBER 21, 2012

0 50 100
Feet
1 inch = 50 feet

ACCESS POINT
AT BROKEN PORTION
OF 8" PVC PIPE

BEND IN 8" PVC
PIPE (FROM PREVIOUS
WORK)

0832-14-33-8628
RESCUE MISSIONS MINISTRIES INC
507 E KNOX ST

0832-14-43-0737
CAMDEN POINTE APARTMENTS LLC
601 E KNOX ST

0832-14-33-5596
RESCUE MISSIONS MINISTRIES INC
1900 AVONDALE DR

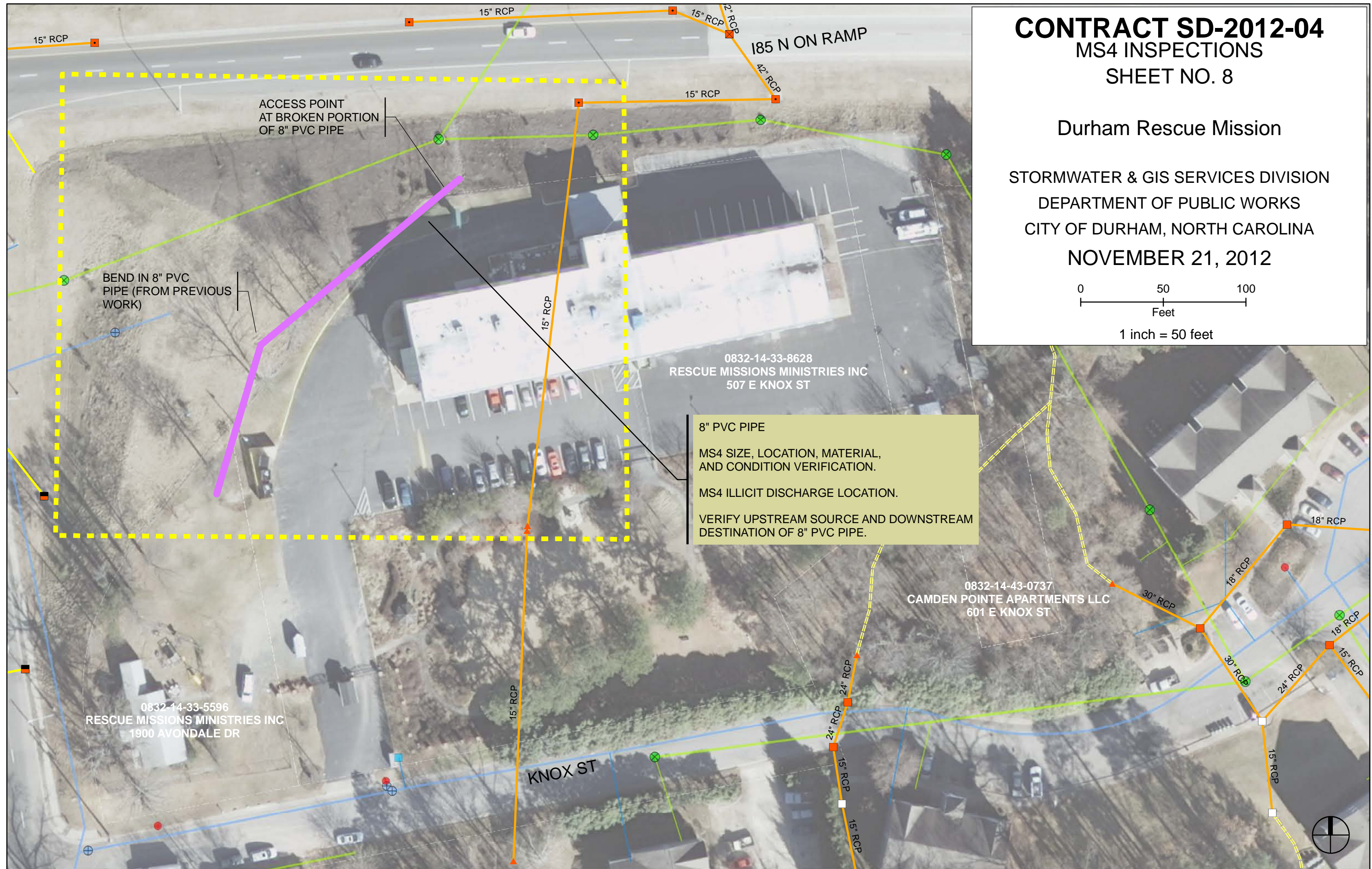
KNOX ST

8" PVC PIPE

MS4 SIZE, LOCATION, MATERIAL,
AND CONDITION VERIFICATION.

MS4 ILLICIT DISCHARGE LOCATION.

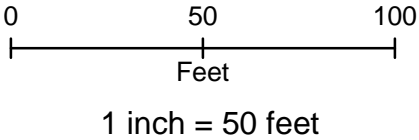
VERIFY UPSTREAM SOURCE AND DOWNSTREAM
DESTINATION OF 8" PVC PIPE.



CONTRACT SD-2012-04
MS4 INSPECTIONS
SHEET NO. 9

2024 West Main Street

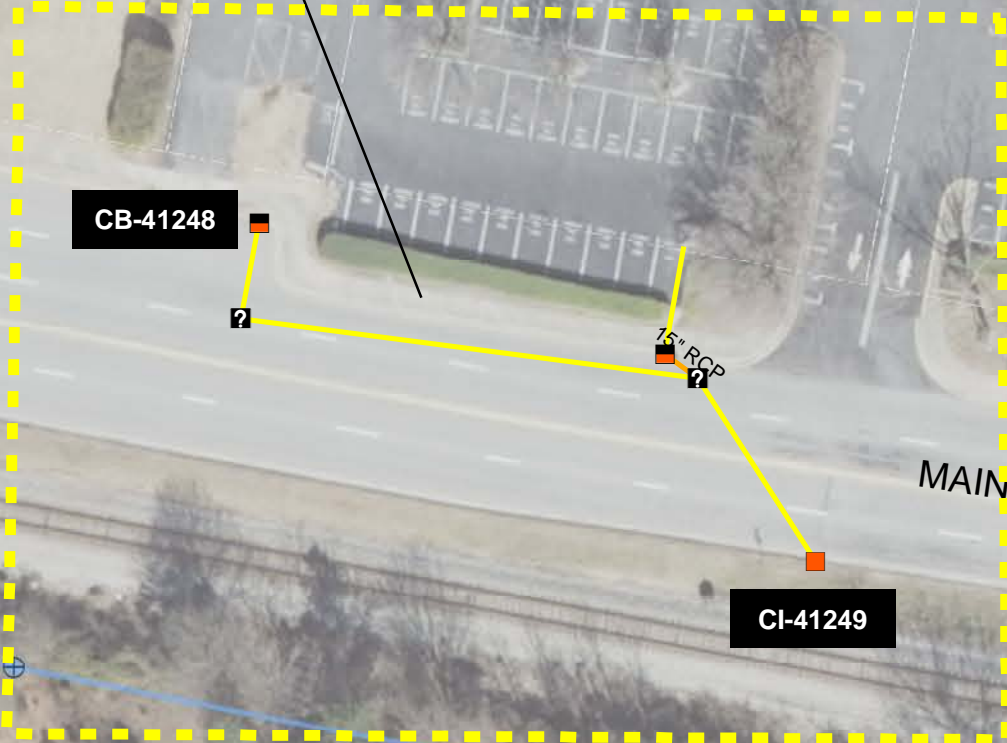
STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA
NOVEMBER 21, 2012



FROM: CB-41248
TO: CI-41249

MS4 SIZE, LOCATION, MATERIAL,
AND CONDITION VERIFICATION.

VERIFY ALL UPSTREAM SOURCES OF
INCOMING PIPES AND JUNCTION BOXES.



0822-18-21-7804
CPGPI ERWIN MILL LLC
2024 W MAIN ST

0822-18-21-7551
2020 WEST MAIN LLC
2020 W MAIN ST

MAIN ST

0822-18-21-6099
NC DEPT OF TRANSPRTN
1600 W PETTIGREW ST

ERWIN RD

PETTIGREW ST



CONTRACT SD-2012-04

MS4 INSPECTIONS

SHEET NO. 10

Peachtree Place @ Liberty Street

STORMWATER & GIS SERVICES DIVISION

DEPARTMENT OF PUBLIC WORKS

CITY OF DURHAM, NORTH CAROLINA

NOVEMBER 21, 2012

0 50 100
Feet

1 inch = 50 feet

0831-09-16-4505
DURHAM CRISIS RESPONSE CENTER
206 N DILLARD ST

0831-09-16-4553
ROGALSKI JAMES M
212 N DILLARD ST

0831-09-16-3420
MACPHEE KEELEE JOY
204 N DILLARD ST

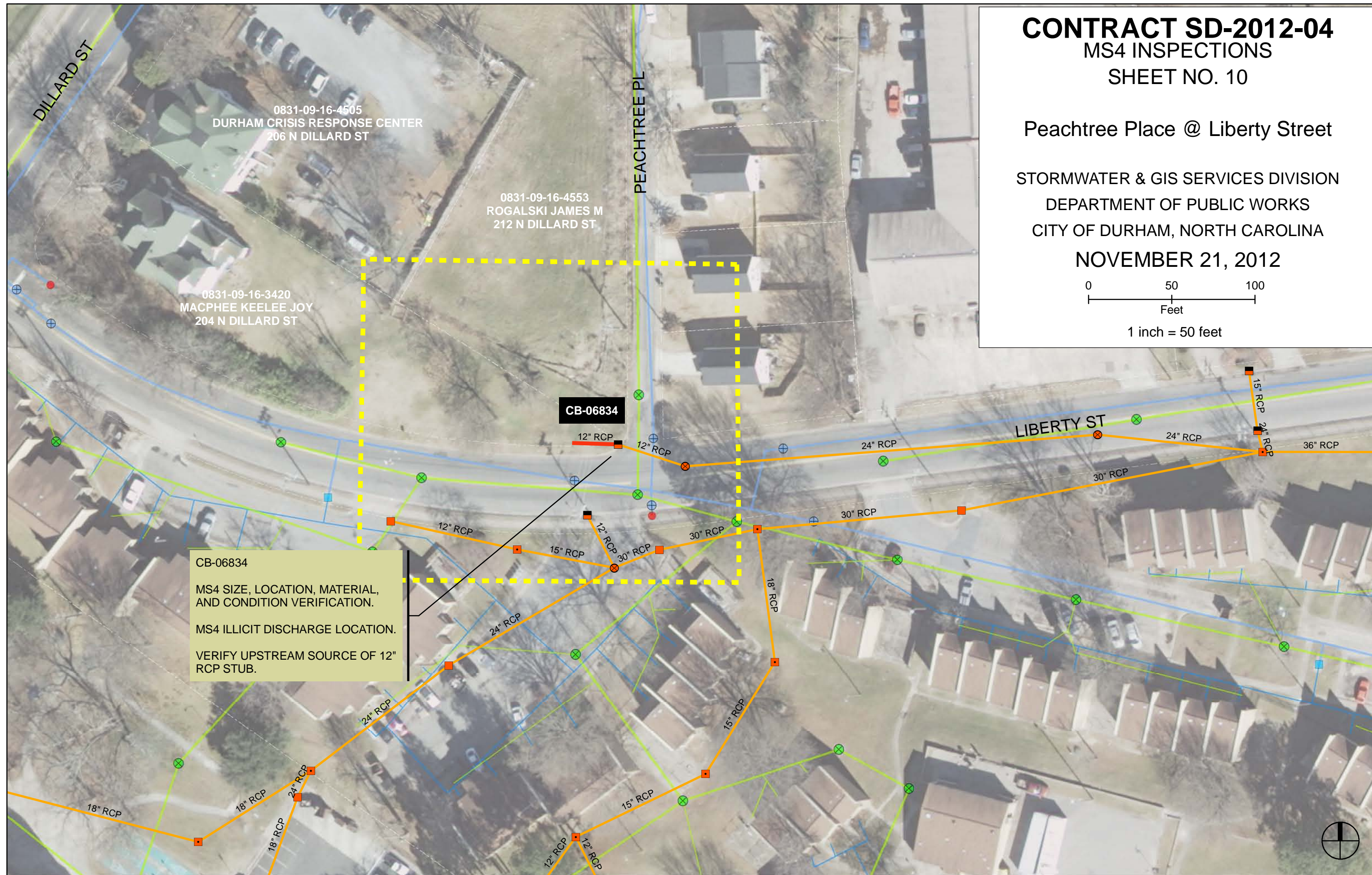
CB-06834

CB-06834

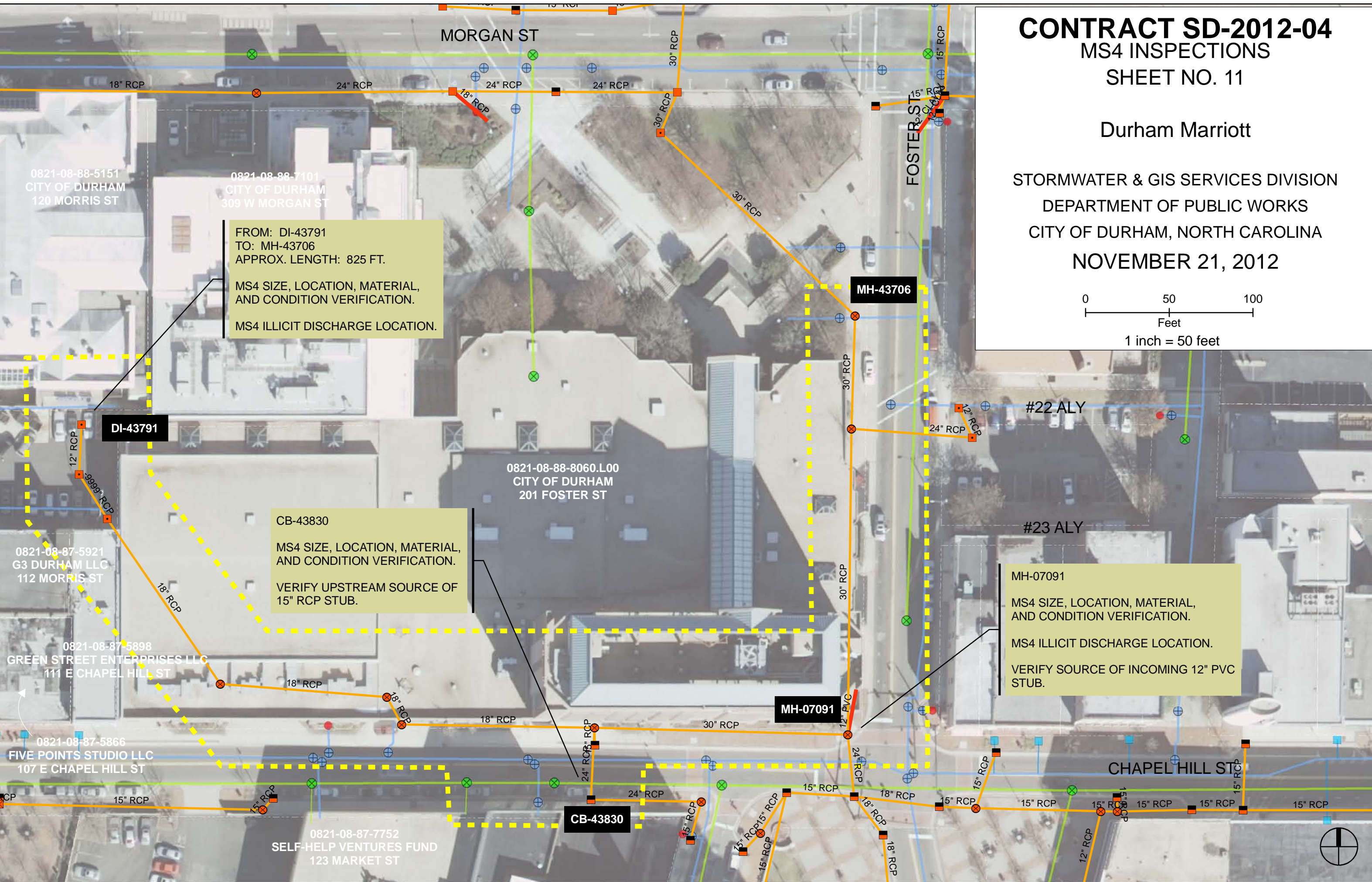
MS4 SIZE, LOCATION, MATERIAL,
AND CONDITION VERIFICATION.

MS4 ILLICIT DISCHARGE LOCATION.

VERIFY UPSTREAM SOURCE OF 12"
RCP STUB.



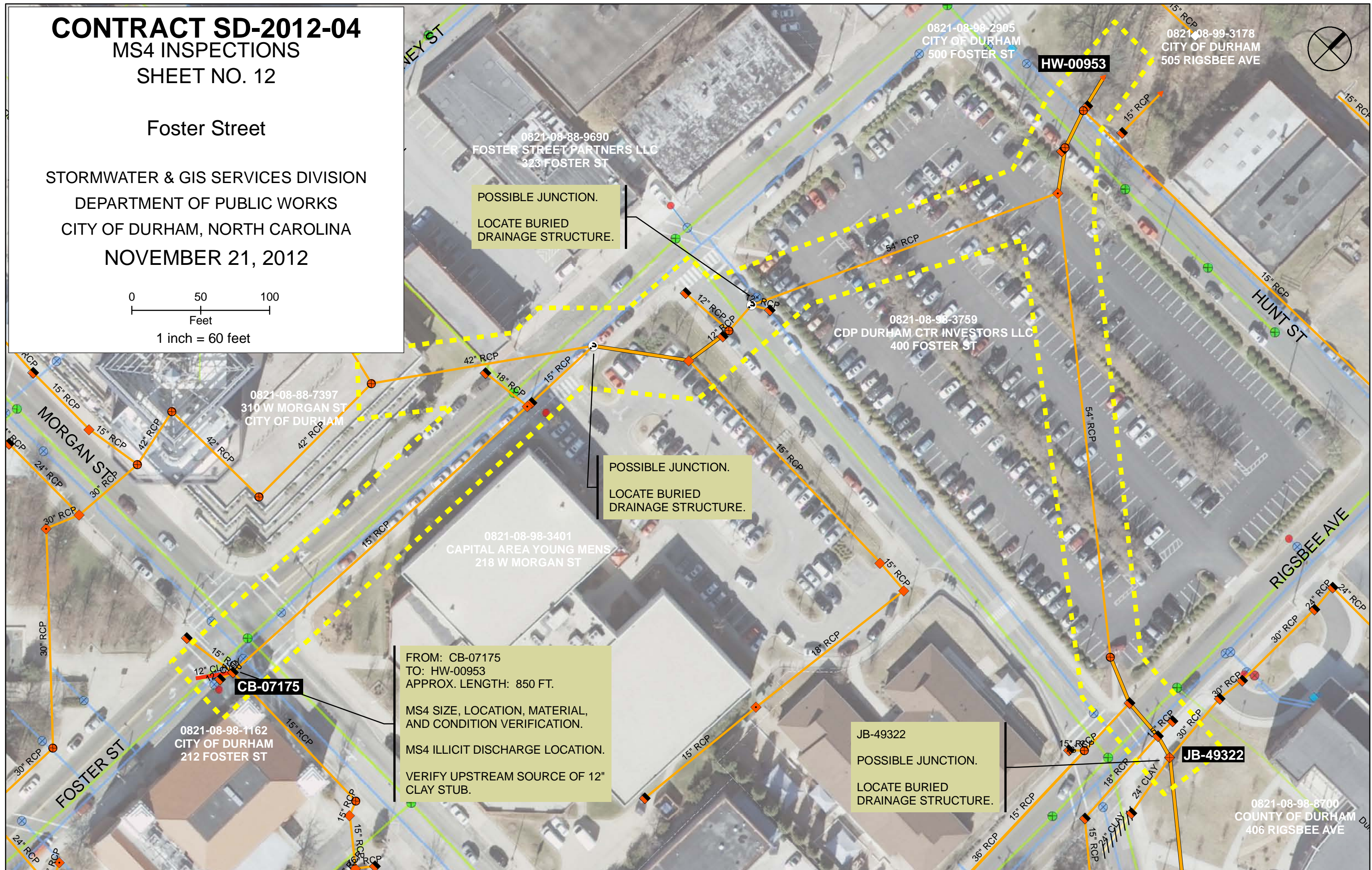
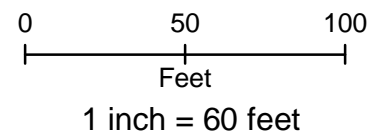
STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA
NOVEMBER 21, 2012

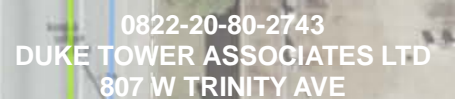


CONTRACT SD-2012-04
MS4 INSPECTIONS
SHEET NO. 12

Foster Street

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA
NOVEMBER 21, 2012

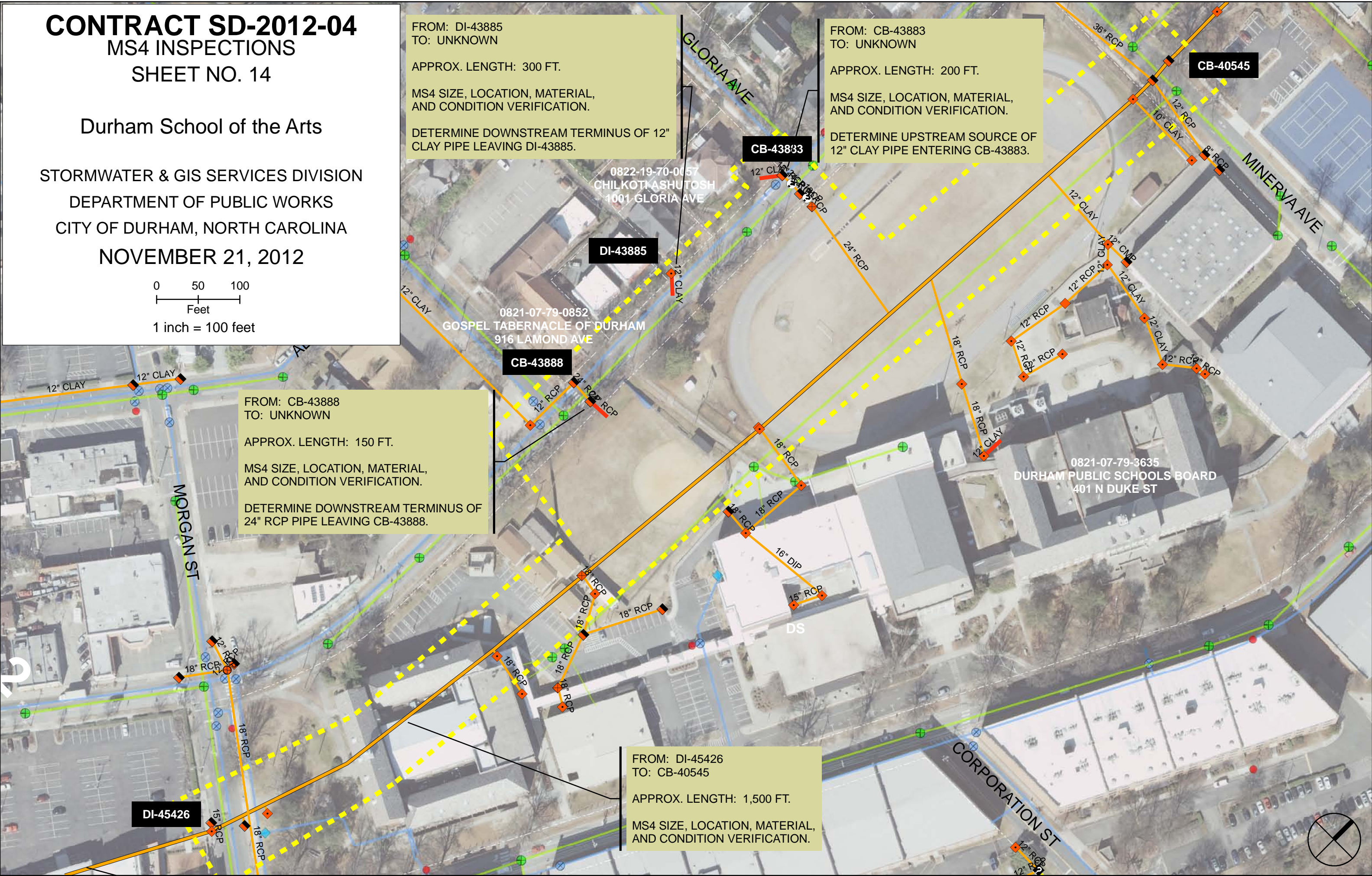
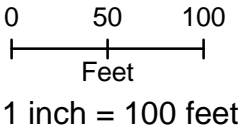


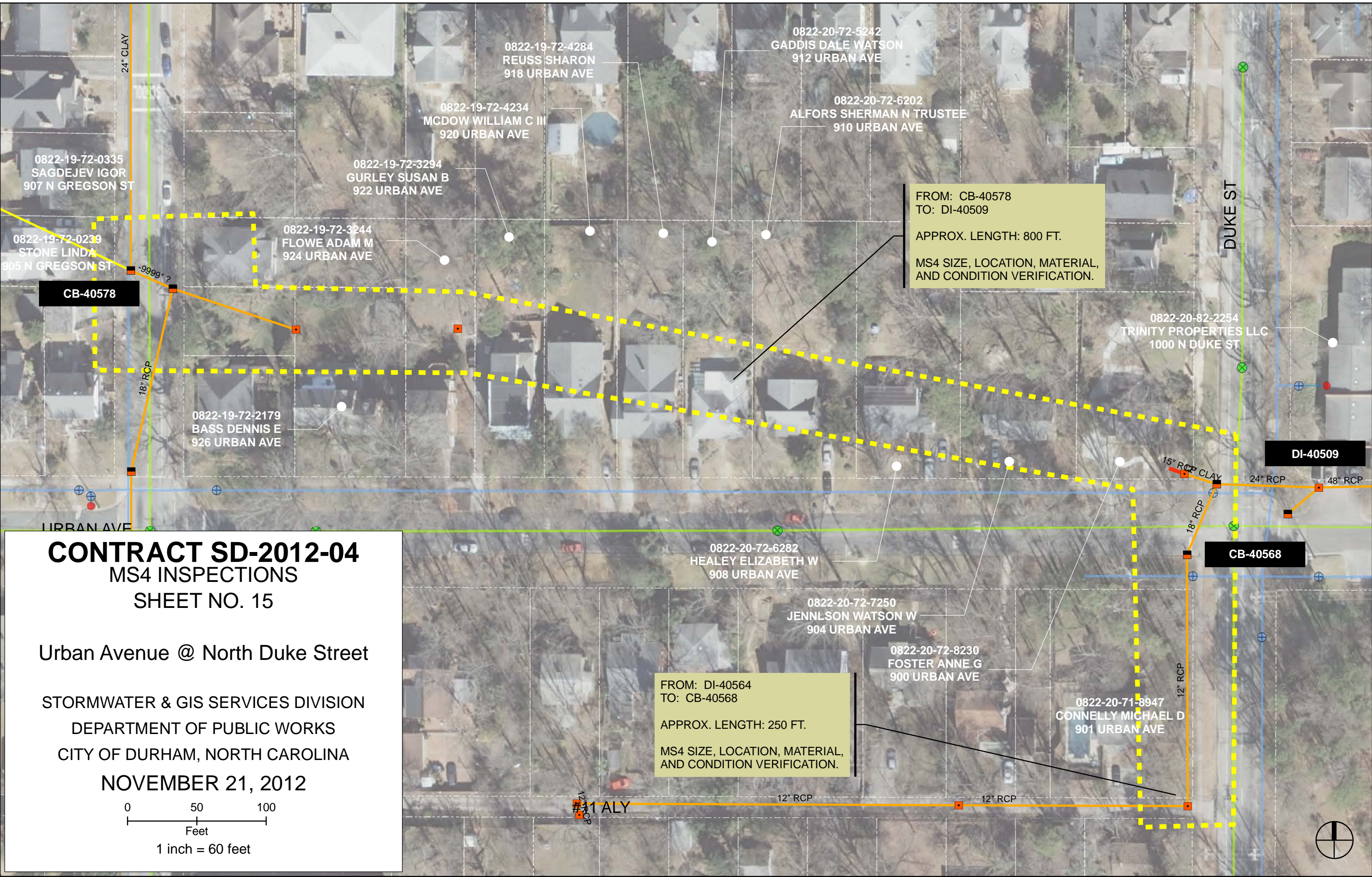


CONTRACT SD-2012-04
MS4 INSPECTIONS
SHEET NO. 14

Durham School of the Arts

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA
NOVEMBER 21, 2012

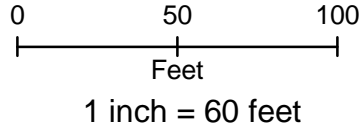




CONTRACT SD-2012-04
MS4 INSPECTIONS
SHEET NO. 15

Urban Avenue @ North Duke Street

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA
NOVEMBER 21, 2012



FROM: CB-40578
TO: DI-40509

APPROX. LENGTH: 800 FT.

MS4 SIZE, LOCATION, MATERIAL,
AND CONDITION VERIFICATION.

FROM: DI-40564
TO: CB-40568

APPROX. LENGTH: 250 FT.

MS4 SIZE, LOCATION, MATERIAL,
AND CONDITION VERIFICATION.

CONTRACT SD-2012-04
MS4 INSPECTIONS
SHEET NO. 16

North Queen Street @ Ottawa Avenue

STORMWATER & GIS SERVICES DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF DURHAM, NORTH CAROLINA

NOVEMBER 21, 2012

